

IN THE CLAIMS

25. (Currently Amended) An implant comprising:

a body with first and second ends and a plurality of through-holes extending between the ends;

a first and second cortical end cap disposed respectively on each end of the body, at least one of the end caps comprising a height and a plurality of recesses each defining: a wall surface extending along the height of the cap, receiving regions having a depth that is less than the height of the cap, and a bearing surface disposed at an angle to the wall surface at an end therein; and

a plurality of cortical struts;

~~wherein the depth of the receiving regions is less than the height of the end cap so that the receiving regions do not extend completely through the end cap; and~~

wherein each cortical strut is disposed in one of the through holes of the body and ~~mates in one of the receiving regions of the cap so that at least a portion of the struts~~ received in one of the recesses so that the strut bears against at least a portion of the bearing surface in the recess.

26. (Canceled)

27. (Previously Presented) The implant of claim 25, wherein the cortical strut received in the receiving region of the cap is press-fit therein.

28. (Canceled)

29. (Previously Presented) The implant of claim 25, wherein the implant comprises demineralized bone.

30. (Previously Presented) The implant of claim 25, wherein the implant comprises partially demineralized bone.

31. (Previously Presented) The implant of claim 25, wherein the body comprises osteoconductive material.

32. (Previously Presented) The implant of claim 25, wherein the body comprises cancellous bone.

33. (Canceled)

34. (Previously Presented) The implant of 25, wherein the struts are disposed generally parallel to each other.

35. (Previously Presented) The implant of claim 25, wherein the struts are cylindrical.

36. (Previously Presented) The implant of claim 25, wherein the struts have a triangular cross-section.

37. (Previously Presented) The implant of claim 25, wherein the struts have a rectangular cross-section.

38. (Previously Presented) The implant of claim 25, wherein the body is cylindrical.

39. (Previously Presented) The implant of claim 25, wherein the wall surface is perpendicular to the bottom surface and the bearing surface is at an angle of approximately 90 degrees to the wall surface ~~end caps are configured and dimensioned to distribute loading on the implant.~~

40. (Previously Presented) The implant of claim 39, wherein the bearing surface is substantially planar ~~cortical struts are sized and configured to serve as load bearing members.~~

41. (Currently Amended) An implant sized and configured for placement between adjacent vertebral bodies, the implant comprising:

a first cortical end cap having a height defined between a top surface for engaging a vertebral body[[,]] and a bottom surface, the bottom surface defining at least one recess having a depth less than height of the cap, and a bearing surface disposed in the recess and oriented at an angle to the height of the end cap ~~and a receiving region disposed therebetween;~~

a second cortical end cap having a top surface for engaging a vertebral body and [[,]] a bottom surface[[,]] ~~and a receiving region disposed therebetween;~~

a cancellous body having a first end for engaging the bottom surface of the first cortical end cap, a second end for engaging the bottom surface of the second cortical end cap, and at least one through-hole extending therebetween; and

at least one cortical strut disposed in the at least one through-hole formed in the body and engaging at least a portion of the bearing surface of ~~in the at least one receiving region formed in the first and second end cap~~[[s]]. [[;]]

~~wherein the at least one receiving region formed in the end caps comprise a recess that does not extend completely through the end cap; and~~

~~wherein the end caps are sized and dimensioned to serve as load-distributing members and the at least one cortical strut is sized and configured to serve as a load-bearing member~~[[.]]

42. (Cancelled)

43. (Currently Amended) The implant of claim 41, wherein the at least one cortical strut is press-fit in the at least one recess of the first end cap ~~receiving region~~.

44. (Currently Amended) The implant of claim 41, wherein the ~~at least one receiving region formed in the end caps~~ has a bearing surface is substantially planar at an end thereof.

45. (Cancelled)

46. (Previously Presented) The implant of claim 41, wherein the implant comprises demineralized bone.

47. (Previously Presented) The implant of claim 41, wherein the implant comprises partially demineralized bone.

48. (Previously Presented) The implant of claim 41, wherein the struts are disposed generally parallel to each other.

49. (Previously Presented) The implant of claim 41, wherein the struts are cylindrical.

50. (Previously Presented) The implant of claim 41, wherein the struts have a triangular cross-section.

51. (Previously Presented) The implant of claim 41, wherein the struts have a rectangular cross-section.

52. (Previously Presented) The implant of claim 41, wherein the body is cylindrical.

53. (Cancelled)

54. (Previously Presented) An implant sized and configured for placement between adjacent vertebral bodies, the implant comprising:

a first cortical end cap having a top surface for engaging a vertebral body, a bottom surface, a ~~thickness~~ height dimension and a first longitudinal axis both extending between the top surface and the bottom surface, and at least one recess disposed in the bottom surface and having a depth less than the thickness of the first end cap, the recess defining a first bearing surface disposed at an angle to the first longitudinal axis therein;

a second cortical end cap having a top surface for engaging a vertebral body, a bottom surface, a ~~thickness~~ height dimension and a second longitudinal axis both extending between the top surface and the bottom surface, and at least one recess disposed in the bottom surface and having a depth less than the thickness of the second end cap, the recess defining a second bearing surface disposed at an angle to the second longitudinal axis therein;

a cancellous body having a first end for engaging the bottom surface of the first cortical end cap, a second end for engaging the bottom surface of the second cortical end cap, and at least one through-hole extending therebetween;

at least one cortical strut disposed in the at least one through hole formed in the body and in the at least one recess formed in the first and second end caps, the strut engaging at least a portion of the first and second bearing surfaces;

~~wherein the first and second ends of the cancellous body do not engage the vertebral body; and~~

~~wherein at least one of the recesses formed in either of the first or second end cap has a depth less than the height of the end cap so that the recess does not extend completely through the end cap.~~

55. (New) The implant of claim 54, wherein the first bearing surface is disposed at an angle of about 90 degrees to the first longitudinal axis.

56. (New) The implant of claim 55, wherein the second bearing surface is disposed at an angle of about 90 degrees to the second longitudinal axis.

57. (New) The implant of claim 54, wherein at least the first or second bearing surface is substantially flat.

58. (New) The implant of claim 25, wherein the bearing surface is substantially flat.

59. (New) The implant of claim 41, wherein the bearing surface is oriented at an angle of approximately 90 degrees to the height of the end cap.

59. (New) The implant of claim 41, wherein the bearing surface is substantially flat.